

Update on IdM for Research: What's new since SC15?

Von Welch

MAGIC @ SC16
Salt Lake City, Utah
November 15th, 2016



**CENTER FOR APPLIED
CYBERSECURITY RESEARCH**

INDIANA UNIVERSITY

Pervasive Technology Institute

This talk...

- Covering both Identity Management (IdM) and Identity & Access Management (IAM)
- Update since my talk at SC15:
<https://dx.doi.org/10.6084/m9.figshare.3118135>



CENTER FOR APPLIED
CYBERSECURITY RESEARCH

INDIANA UNIVERSITY
Pervasive Technology Institute

InCommon News

- Welch still advisor for research to Steering Committee
 - Would like to see Research SP as full member.
- InCommon joined EduGain global inter-federation
 - <https://www.incommon.org/edugain/>
- NSF joining R&S still in progress.



IAMOnline Session, August 10th 2016: Paving the Way for Research Collaboration

- Worth watching, presentations from:
 - Chris Whalen, NIH
 - Kathleen Fitzpatrick, Modern Language Association
 - Scott Koranda, LIGO
- <https://incommon.org/iamonline/>
 - Slides: https://incommon.org/docs/iamonline/20160810_IAMOnline.pdf
 - Video: <http://internet2.adobeconnect.com/p3rt6r6gj5z/>



CENTER FOR APPLIED
CYBERSECURITY RESEARCH

INDIANA UNIVERSITY
Pervasive Technology Institute

Free the Attributes!

- Free the Attributes! Attribute Release, Scalable Consent, and User Convenience
- Also archived at <https://incommon.org/iamonline/>
 - April 13, 2016



CENTER FOR APPLIED
CYBERSECURITY RESEARCH

INDIANA UNIVERSITY
Pervasive Technology Institute

Security Incident Response Trust Framework for Federated Identity (Sirtfi)

- <https://refeds.org/sirtfi>
- Goal: Enable the coordination of incident response across federated organizations.
- Proof of concept starting with NCSA, the University of Chicago, and LIGO



CENTER FOR APPLIED
CYBERSECURITY RESEARCH

INDIANA UNIVERSITY
Pervasive Technology Institute

Bad News: Lack of Attribute Release to Science SPs is (Still) a Big Problem

- Over 800 participants in InCommon, >900 by end of 2016.
- Global R&S category: 55 InCommon SPs.
- A total of 122 InCommon Identity Providers release attributes to R&S services; 39 IdPs release attributes to all global R&S SPs while another 83 IdPs release the attribute bundle to R&S SPs registered by InCommon only.
- Result: Common for research SPs to report <50% (as low as 10%!) of researchers able to use Fed IdM.



Good News: InCommon Steering Committee Resolution

“InCommon Identity Provider Operators will move to releasing an identified set of attributes to all InCommon Service Provider Operators.”

April 6, 2016

<https://www.incommon.org/docs/InCommonReport2016.pdf>



**CENTER FOR APPLIED
CYBERSECURITY RESEARCH**

INDIANA UNIVERSITY
Pervasive Technology Institute

NSF Cybersecurity Center of Excellence IAM Work



CENTER FOR TRUSTWORTHY
SCIENTIFIC CYBERINFRASTRUCTURE
The NSF Cybersecurity Center of Excellence

- <http://trustedci.org/iam/>
- CTSC's Guide to Developing Cybersecurity Programs for NSF Science and Engineering Projects (which contains an IAM section)
- Identity Management Best Practices: A CTSC Blog Series
 - Ongoing blog posts (“iam” label)
- CTSC Federated Identity Discussion List
- CTSC Training: Streamlining Collaboration with InCommon and Identity Federations
- CTSC Engagements: IAM-focused engagements to-date include DataONE, IBEIS, LIGO, and SciGaP
- Partner to EU Authentication and Authorisation for Research and Collaboration (AARC) project - <https://aarc-project.eu/>



CENTER FOR APPLIED
CYBERSECURITY RESEARCH

INDIANA UNIVERSITY
Pervasive Technology Institute

Update on 2015 Opinions

- IdM/IAM ongoing challenge, but maturing.
- InCommon pushing on R&S, slow going
 - Many sites think it solely a B2B solution
- 2FA becoming common w/soft tokens
 - May become default and assumed?
- Social identities via OAuth not going away
 - Low assurance solution for science?
- Ecosystem more likely than single solution



Thank you

Von Welch
vwelch@iu.edu

Many thanks to Jim Basney and Scott Koranda



CENTER FOR APPLIED
CYBERSECURITY RESEARCH

INDIANA UNIVERSITY
Pervasive Technology Institute